



SGL Automotive Carbon Fibers LLC

Global carbon fiber products company builds state-of-the-art facility in Moses Lake and creates 80 jobs for the community.

8781 Randolph Road NE
Moses Lake 98837

Number of Employees: 80 Year Founded: 2009

Region Served: International www.sglgroup.com

Profile

SGL Automotive Carbon Fibers LLC is a joint venture of the SGL Group and BMW, both based in Germany. The company's new Moses Lake facility employs 80 workers manufacturing carbon fiber, a cutting-edge material strong enough to replace steel in some of BMW's automotive frames.

SGL and BMW were drawn to eastern Washington because of the abundance of clean and renewable hydropower. The State Energy Program provided a grant to encourage the company to invest in energy-efficient equipment.

Following a year of design work and nine months of construction, SGL Automotive Carbon Fibers LLC opened its Moses Lake production facility on September 1, 2011. Billed as "the world's most cost-effective carbon fiber plant" by company CEO Robert Koehler, SGL occupies 60 acres of land that was formerly part of Larson Air Force Base.

Two-hundred jobs were created during construction, and the complete plant supports 80 full-time permanent positions. A grant from the State Energy Program helped SGL equip the facility with fuel-efficient ovens, furnaces, and motors, plus sophisticated waste-recovery equipment to capture excess heat and use it for other applications.

Carbon fiber material is a lightweight reinforced plastic valued for its strength, durability and resistance to heat and corrosion.

Used increasingly in high-tech applications for solar and wind energy production, carbon fiber is favored over heavier steel, copper and wood materials. Carbon fiber produced at SGL's Moses Lake facility will be used for the futuristic Megacity Vehicle i3 produced by German car manufacturer BMW. Featuring recycled materials and a lithium-ion battery that augments the electric motor, the i3 is an urban luxury vehicle that will hit showrooms in late 2013.

"Lightweight construction is a core aspect for sustainable mobility, improving both fuel consumption and CO2 emissions," said Andreas Wuellner, Managing Director of SGL Automotive Carbon Fibers, in a company press release. "This is particularly relevant for electric-powered vehicles such as the Megacity Vehicle."



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"This new plant in Moses Lake is a milestone in the use of carbon fibers for large-scale production in the automotive industry."

—Robert Koehler, CEO of SGL

The decision to build the carbon fiber plant in Moses Lake was based primarily on Washington's ample supply of renewable clean hydropower and resultant competitive energy costs.

Favorable infrastructure, existing utilities, a skilled labor force and the ease of working with local government officials were also contributing factors, according to SGL.

The carbon fiber produced by SGL requires several phases of activity on multiple continents. First the raw material, polyacrylonitrile, is produced in Japan through a joint effort between SGL and Mitsubishi Rayon. The material is then shipped to Washington where it is converted into strands of carbon fibers in high-temperature furnaces.

Then the fiber, up to 3,300 tons per year, is transferred to Germany, where it is processed into carbon fiber reinforced

plastics (CFRP) parts and components to be used in BMW's auto factories. Each vehicle utilizes about 660 pounds of carbon fiber.

"This new plant in Moses Lake is a milestone in the use of carbon fibers for large-scale production in the automotive industry," said Mr. Koehler in an SGL press statement. Together, SGL and BMW invested a total of \$100 million to construct the facility. "This significant investment further underlines our commitment to the U.S."

By locating in Moses Lake, SGL contributed to the emerging high-tech manufacturing sector in the region, where Microsoft and Intuit have also established facilities in recent years.

Governor Christine Gregoire praised the decision: "A new carbon fiber manufacturing plant in Moses Lake means new jobs for our people. It means growth for our state. And it means we will continue to lead in the green economy."



BMW's concept of the 2013 i3 Megacity Vehicle